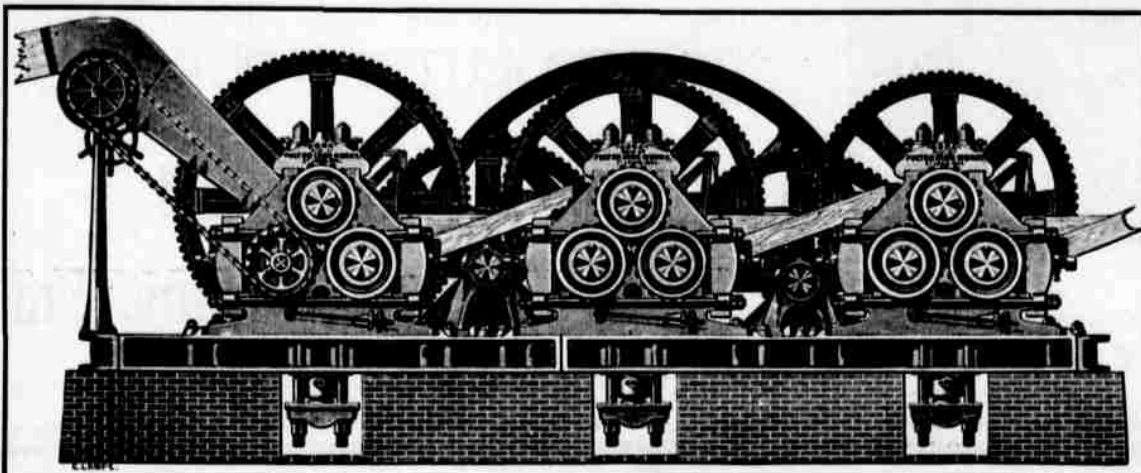


FULTON IRON WORKS

SAINT LOUIS, MISSOURI

TO THE SUGAR PLANTERS AND MANUFACTURERS OF THE HAWAIIAN ISLANDS

WE solicit a share of your patronage in the way of Cane Mills and mill improvements, gearing and mill engines. Making Cane Mills a specialty; we aim to furnish all the latest and best improvements, combined with first class material and workmanship. The nine-roller mill illustrated below was erected in 1892 and has given unqualified satisfaction, reaching a higher per cent. of extraction than any previous mill—82 per cent. without saturation. Two sample mills of this class, with Crushers of our make, are now installed in the sugar house of the Ewa Plantation, Oahu, Messrs. Castle & Cooke, Ltd., Agents, to whom we respectfully refer as to results of work done, construction, etc., character of workmanship, and our reliability in fulfilling our contracts. The Honolulu Plantation and the Waialua Plantation, on the same island, also have installed in their sugar houses, mills of same size and type, there being also mills of this same type, but of various sizes, in operation in several of the other sugar houses of the different islands. We desire to call especial attention to the hydraulic pressure regulators furnished with these mills. These operate to give an even and constant load on the top roller; the amount of weight is regulated at pleasure and is absolute safety against breaking of shafts and gearing.



THE "CORA" NINE ROLLER CANE MILL

BUILT BY
FULTON IRON WORKS

Iron Founders and General
..Machinists..
SAINT LOUIS, MO., U. S. A.

Below are a few interesting statistics and comments relative to the results obtained from the "Cora" Cane Mills in use at the Ewa Plantation and the Waialua Plantation. Note the Letter of Mr. Lowrie, former manager of the Ewa Plantation, showing as it does an unparalleled record of effective cane crushing and juice extracting, covering four seasons and the crushing of about four hundred thousand tons of cane done with the famous "Cora" nine roller mill of the Fulton Iron Works:

MANAGER'S OFFICE, EWA PLANTATION CO.,
HONOLULU, Oahu, H. I., Aug. 8, 1898.
FULTON IRON WORKS, St. Louis, Mo., U. S. A.

GENTLEMEN:

I herewith give you a full statement of work done during last season ending July 9, 1898.

Days grinding, 145; tons of cane ground, 131,794.050; tons of cane ground per day, 908.092; extraction, 93.50 per cent. of total sugar; 83 per cent. of weight of cane; dilution (on normal juice), 21.65 per cent.; fibre in cane, 11.29 per cent.; average load on hydraulics, 360, 383, 406 tons.

Records for four (4) years for the mills, and they are as good as ever:

Year	Day Grinding	Tons Cane per Day	Total Tons for Season
1895	104 1/4	588 1/4	61,617
1896	125 1/4	691 1/4	86,784
1897	130 1/4	808 1/4	105,315
1898	149	908 22-100	131,794

Yours truly,

W. J. LOWRIE,
Manager Ewa Plantation Co.

WAIALUA, Oahu, Oct. 17, 1901.

MESSRS. CASTLE & COOKE, LTD., Honolulu, H. I.

DEAR SIRS:

In reply to your inquiry about the cane mill at Waialua and quality of its work, I would say:

The Nine-roller Mill, Crusher, Engine and Gearing are all of the latest and best design and were built by the Fulton Iron Works of St. Louis, Mo.

The mill rollers are 34 inches and crusher 32 inches

in diameter by 78 inches long, and are driven by a 30x60-inch Corliss Engine and one train of gearing.

The whole plant is compact and all parts are easily accessible. The Crusher and Mills are running under hydraulic pressure, Fisher's Patent, with pressure applied on the top rollers.

To show the efficiency of the plant the following figures are given:

1st run, 22 1/4 hours grinding, high speed:
1325 1860-2000 tons cane.

Extraction, 93.91 per cent. of total sucrose in cane.

Extraction, 83.02 per cent. of total weight of cane.

Dilution, 14 per cent.

2nd run, 23 hours grinding, low speed:

832 95-2000 tons cane.

Extraction, 94.55 per cent. of total sucrose in cane.

Extraction, 83.77 per cent. of total weight of cane.

Dilution, 23.56 per cent.

Pressure on Crusher 1st Mill 2nd Mill 3rd Mill
150 tons 380 tons 400 tons 420 tons

These results were obtained without any attempt to make a record, and the two days run were selected to show the quality of the work under very different conditions of speed and amount of dilution.

Yours very truly,

WM. W. GOODALE,
Manager Waialua Agricultural Co., Ltd.

HONOLULU, Oahu, T. H., Oct. 4, 1901.

MESSRS. CASTLE & COOKE, LTD., Honolulu, Oahu.
GENTLEMEN:

I take pleasure in speaking of the merits of the 9-roller "Cora" Mill and Crusher now in use at the Ewa Plantation. It is a compact and powerful set of machinery and I know of no better for the extraction of juice from the sugar cane.

The crusher added to the mill by the Fulton Iron Works in 1899, has proved a very efficient adjunct. It delivers a flat, even "blanket" of canes to the mill rollers in the best possible shape for good extraction, and very largely increases the capacity of the mill; it has extracted as high as 59.98 per cent. of the sugar in the cane by actual tests; and, on account of its strength, is not liable to breakdowns.

When I say that, since the "Cora" mill was set up at the Ewa mill seven years ago, there has been ground by it 1,066,022 tons of cane; that of this amount 505,000 tons includes the crops of 1900 and 1901; and that for the past two years the mill has been grinding incessantly and is still grinding; the excellence of the apparatus speaks for itself.

Yours truly,

GEO. F. RENTON,
Manager Ewa Plantation Company.

For Further Particulars and Prices Apply to
FULTON IRON WORKS, ST. LOUIS, MO.
OR TO
CASTLE & COOKE, Ltd., Honolulu, H. T.
SOLE AGENTS FOR THE HAWAIIAN ISLANDS